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Claims

[c1] A method of manufacturing a trim panel assembly using a first tool having a mold cavity and a movable mold element to manufacture a first trim component and using a second tool to manufacture a second trim component comprising:

positioning the mold element such that the mold element at least substantially obstructs the mold cavity and inserting a first material in the cavity to form the first trim component having a receptacle resulting from the obstruction of the cavity by the element;
removing the first trim component from the first tool;
manufacturing a second trim component having a second material using a second tool that is different from the first tool; and
securing the second trim component within the receptacle.

[c2] The method of Claim 1, wherein the second material comprises cloth.

[c3] The method of Claim 1, wherein the second material comprises vinyl.

[c4] The method of Claim 1, wherein the first material is substantially rigid.

[c5] The method of Claim 1, wherein the receptacle is a recess.

[c6] The method of Claim 1, wherein the receptacle is an aperture.

[c7] The method of Claim 1, wherein the mold element has a first surface and a second surface extending from the first surface, the second surface obstructing the cavity to form a channel in the first material.

[c8] The method of Claim 1, further comprising positioning an insert within the cavity to incorporate the insert within the trim component.

[c9] An automotive vehicle tooling system for manufacturing a trim panel assembly comprising:

a first tool operable to produce a first component of a first material, said first tool having a first cavity and a second cavity, said first tool further having a mold element movable between a first position to expose said second cavity and a second position to block said second cavity, said first tool receiving said first material and producing said panel having a receptacle when said mold element is positioned in said sec-

ond position; and

a second tool different than said first tool operable to produce a second component having a second material different than said first material;

wherein said second component is secured within said receptacle of said first component.

[c10] The system of Claim 9, further comprising:

positioning said mold element of said first tool in said first position;

introducing a third material into said first cavity and said second cavity to form a third trim component; and

removing said third trim component from said first tool.

[c11] The system of Claim 9, wherein said receptacle is a recess.

[c12] The system of Claim 9, wherein said receptacle is an aperture.

[c13] The system of Claim 9, wherein said second component comprises cloth.

[c14] The system of Claim 9, wherein said second component comprises vinyl.

[c15] The system of Claim 9, wherein said first component comprises an insert.

[c16] An automotive trim panel assembly and a tooling system for producing the automotive trim panel comprising:

a first tool having a mold cavity and a mold element movable between a first position in which at least a majority of the mold element is positioned outside the cavity and a second position in which the element at least substantially obstructs the cavity;

a second tool assembly different from the first tool assembly;

manufacturing a first component of the trim panel assembly by inserting a first material within the first tool with the mold element in the second position to form a receptacle within said first component;

manufacturing a second component of the trim panel assembly using the second tool assembly and a second material; and

securing the second component within the receptacle of the first component.

[c17] The trim panel assembly and tooling system of Claim 16, wherein said second material comprises cloth.

[c18] The assembly of Claim 16, wherein said second material comprises vinyl.

[c19] The assembly of Claim 16, wherein said receptacle is an aperture.

[c20] The assembly of Claim 16, wherein said receptacle is a recess.